



Innovation Programme

2021 Report - Nursing and Midwifery

TO BE READ IN CONJUNCTION WITH THE SPARK ANNUAL REPORT 2021



Spark Innovation Programme

A group of clinicians, administrative staff and designers that make up a Frontline Innovation arm of the HSE.

Those at the frontline are in the perfect position to identify opportunities for Innovation.

Aims:

- **Encourage and support** frontline innovation and quality improvement across all healthcare disciplines
- **Empower and engage** frontline staff
- **Provide design and innovation expertise** to promote the role of human centred thinking in the health system
- **Promote early engagement with emerging technology**
- **Create a network of Innovators** to spread good innovative ideas from healthcare setting to healthcare setting

Spark and the ONMSD

Two years in!

2021 ended a second full year of ONMSD sponsorship in the Spark Innovation programme.

The Spark Innovation Programme and ONMSD collaboration group met on 5 occasions throughout the year to provide updates on initiatives and to explore how their shared interests would be met that year.

Throughout the year the group discussed the development of a Nursing and Midwifery Innovation fellow role within the Spark Innovation Programme. From these discussions a clear need for the role was identified and a job description was developed.

The Spark Innovation Programme would like to thank Dr Maureen Flynn for all her endeavours championing the Spark Innovation Programme within the ONMSD and QPD networks. And for the continuing support of Dr Geraldine Shaw as she continues to include Spark in the ONMSD priorities.



Innovations Fellows

- Dr Alan Hopkins remained in the NCHD fellowship for the first 6 months of 2021 he continued to encourage nursing and midwifery contribution to Spark Initiatives.
- The Spark Innovation Programme welcomed two new NCHD fellows in 2021.
- Dr Rachel MacNamara, a public health NCHD and Dr Ivan Wu, a paediatric NCHD joined Spark in July 2021. Their drive and passion for innovation meant the Spark Innovation Programme evolved to it's next stage.
- Noting that although the year had been one of the most challenging in the history of our health service, Rachel was proud to see the enormous capacity for innovation in our hospitals and the resilience of our healthcare workers. Through the fellowship Rachel she aimed to harness the ingenuity and spirit of the healthcare workers to create a health service of which we can be truly proud. Ivan's main priority for applying for the fellowship role was the ability to progress and facilitate innovation for not only doctors within the Irish health service but also my nursing and health & social care professional colleagues.
- Ivan and Rachel were instrumental in promoting the need for a Nursing/ Midwifery fellow, they saw the need for an increase social media presence and together raised the profile online of Spark. Culminating in a record number of Spark Seed applications in October 2021. They put their personal touches to the existing initiatives- trying new way of leading them offering wider opportunities



The advertisement for the first Nursing and Midwifery fellow and the first HSCP fellow were advertised in November 2021. The closing date was the 31st of December 2021!

The evolution of the outcomes of Spark

For the whole of 2021 nurses and midwives were working under covid guidelines within their organisations. They dealt with restrictions to their personal lives outside of work. With new strains of the virus came new challenges and problems that they worked through despite crippling staff shortages and increased workload demands.

In this environment what could Spark offer? Would nurses and midwives still engage in initiatives? The answer was yes. As this report will show nurses and midwives continued to apply, engage in the Spark processes and implement innovative projects in practice.

It has become clear that Spark offers much more to value healthcare professionals than funding for their projects and this contribution cannot be underestimated. The workshops provide a break from the clinical work and give applicants times to think and look at their clinical problems from a different perspective. Led by designers the design thinking skills taught mean they are unlike any other study day they have previously attended. Finally, by teaching nurses and midwives pitching skills, the professional style encouraged will stand to them throughout their whole careers as they progress in other projects and look for support and funding. Spark Ignite provided professional mentorship helping applicants develop.

There is excitement and a sense of achievement not only in being awarded funding but for being shortlisted, for pitching, and in getting feedback. In 2021 Spark saw an increased focus on promotions of Spark endeavours via social media, this too provided additional recognition of effort and commitment of innovation within healthcare settings all over the country.

To summarise on the next page is a comment from a nurse who attended the March 2021 covid call workshop:

The evolution of the outcomes of Spark

“... taking part in the design thinking workshop was very beneficial for us as a team. It provided an opportunity for us to think differently and be exposed to other professionals and teams and hear how others are working. The energy and conversation the application process generated was very fruitful and there is now a greater awareness of innovation supports that we will hopefully use in the future”

Thanks again for the opportunity and I look forward to working with you in the future”

SITUATION

Summary of Spark Initiatives 2021

Frontline Focused

2 Seed Funding rounds	<p>There were 2 rounds of Spark Seed in 2021. Welcoming ideas from a range of innovators, all nursing and midwifery, health and social care professionals and doctors were encouraged to apply. Successful projects are those which are affordable, feasible, bring value to the service and have the potential to be scaled up. Funding of up to 3000 was on offer. Multiple projects were offered funding</p>
Covid Call	<p>In March 2021 Spark held a workshop for the remaining 2020 Spark Covid shortlisted applicants. At these workshops, applicants then pitched their ideas for funding from Spark.</p>
Spark Ignite (managed by HIHI)	<p>Spark Ignite is an innovation competition that is run in collaboration between Health Innovation Hub Ireland (HIHI). The goal of this competition is to help staff in the health service to develop solutions to the challenges faced by care providers and patients.</p> <p>Its mission is to facilitate HSE staff to validate unmet clinical needs and determine if a market exists for their proposed solution, product, or service to meet that need. The goal of the competition is to help staff in the health service develop solutions to challenges faced by healthcare providers and patients Entrants are asked to plan, perfect and then pitch their ideas at the event. The winners of the competition are given funding to further develop their ideas and get ongoing support and mentorship.</p>

Summary of Spark Initiatives 2021

Design Led

Design on the Front Line	<p><i>An initiative to help solve issues identified by frontline healthcare workers during the covid pandemic</i></p> <p>Our frontline staff have faced intense new challenges and covid-19 has exposed cracks and shortcomings in many existing services. Our healthcare system and our people have been under immense pressure. In response, we have created Design on the frontline - an effort to share pressing challenges with the design and innovation community.</p> <p>From frontline staff feedback we developed 3 design briefs which capture the most cited challenges, 'PPE Improvement & Sustainability', 'Frailty and Wellbeing', and 'Communication, Isolation and Boredom'.</p> <p>We trusted the intuitiveness, creativity, and ingenuity of designers. We knew designers were eager to help during this crisis but struggled to know how. This was an opportunity to help by sharing their ideas and to see their idea implemented. We firmly believed that our community of designers and innovators could make a profound impact on healthcare, by proposing solutions that understood the root cause, challenge orthodoxies and that Design on the frontline would represent the merits of the design community and form part of building the case for Human-Centered design to be a key component in our health service</p>
Design weeks	<p>Mater</p> <p>The Spark Innovation Programme has been supporting the Mater-NCAD Design Week since 2019, providing a €3000 Seed Fund for the winning project as well as participating in the judging panel. This year's winner was 'Caitwalk' – a medical device innovation that addresses the need of patients who require something more supportive than a walker but less passive than a transfer aid. The Mater champion for this project, Physiotherapist Caitriona Fingleton, will now have access to the €3000 Seed fund from Spark to help bring the concept to the next stage.</p> <p>St James</p> <p>Seven projects were shortlisted in 2021 and pitched to a judging panel to determine a winning design which received €3000 development funding from Spark to further grow the design at the hospital. This year's winner was Mary Monks – Chief Medical Scientist –for a Safety Improvement Product Design for Staff in the histopathology lab at SJH.</p>

Spark Seed Funding

Spark Seed welcomes ideas from a range of innovators, all nursing and midwifery, health and social care professionals and doctors are encouraged to apply. Spark seed aims to help develop projects which are affordable, feasible, bring value to services and have the potential to be scaled up. The initiative focusses on small, rapidly implementable projects which take a bottom-up approach to change. Funding of up to €3,000 is available. Under the governance of the new NCHD fellows Spark Seed saw a new look and feel in August 2021.

Although continuing to encourage frontline workers to identify a problem in the clinical area in the clinical area, and look at potential solutions in this iteration Rachel and Ivan decided to run 'pitch nights' separately to the design thinking workshops.

The design thinking workshops led by Martin Ryan and Trevor Vaugh included 'How to pitch skills' and following the workshop shortlisted applicants were encouraged to record their pitches ready for presenting at the pitch nights.

This new approach encouraged increased promotional material in social media and within clinical areas. Each night a 'winning pitch' was announced and the other funded projects informed in the week following.



Data on Nursing and Midwifery Applications

Spark Seed Funding

April + August 2021 call

211 Applications

34 Nursing/Midwifery applications + attendees to workshops

9 Nursing/Midwifery funded projects

Covid Call

10 nurses/midwives attended the workshop

5 nursing/ midwifery projects funded.

Data on Nursing and Midwifery Applications - Seed funding August 2021

Anthony Corbett**Senior Staff Nurse, Inpatient CAMHS**

Hazel Unit, Linn Dara Inpatient CAMHS, Cherry Orchard Campus, Ballyfermot Rd, Ballyfermot Spark

The development of a therapeutic workbook, centred on wellness recovery, discharge planning and relapse prevention.

€3000

Bernie Waterhouse & Tony Galvin**CNM2/ CNM1**

St James Hospital

A website providing a comprehensive set of resources aimed at patients and professionals addressing all aspects of upper GI care

€ 2432

Emer O'Rourke**Clinical practice support nurse in urology and kidney transplant**

Beaumont hospital, transplant and urology

Creation of a catheter care passport

€500

Fiona Montgomery**CNM2**

An Solasan, Priorland Road, Dundalk, Co Louth, Louth/Meath Mental Health Service

An active panel or smart board would enhance the experience for our residents

€ 3000

Siobhan Treacy**Health Protection Clinical Nurse Manager 2**

HSE Mid West Department of Public Health

Complete process improvement with a communication solution.

€ 3000

Sarah Lodge**Staff Nurse**

Theatre department, Midland Regional Hospital Portlaoise

Online platform whereby hospitals/departments could share items that are soon to expire, hospitals that are most likely to use the item can request the item and replace it.

€ 2650

Vimal John**Staff Nurse- Dementia Lead**

Nenagh Hospital

The Carer Passport can be a card or a badge that is easily recognised by hospital staff, identifies the passport holder as a carer and includes the name of the patient. This ensures hospital staff are aware of their role as a carer and to involve and consult them in the care and treatment of their family member.

€ 1500

ASSESSMENT

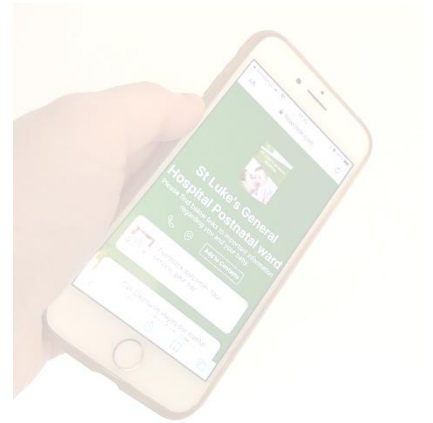
Data on Nursing and Midwifery Applications – Seed funding August 2021 – Case study

Amy Carroll

€3000

CPCM

Maternity, St Luke's General Hospital Kilkenny



Quality Resources Maternity (QR Maternity) uses QR codes to link to carefully chosen information that is professional, up to date, specific, easy to understand and saves time, money and the environment. With one scan, one scroll of a page and one click, women can access relevant quality national and local resources. Contacting specialists, booking antenatal classes or contacting the maternity unit itself is in one place at the click of a button. This provides a trusted source of information instead of the current 'doctor goggle' or the overload of paper leaflets that are sometimes irrelevant, out of date, poorly printed or hard for staff to locate.

Amy describes the Spark Seed experience as “ it was brilliant! I loved the design thinking workshop- the whole process gave me more incentive to get the project done. The skills I learnt pitching meant I was able to pitch the our governance meeting who then suggested I pitch to my hospital group network... so far 9 other maternity hospitals have contacted me about developing their own version of QR maternity’

Data on Nursing and Midwifery Applications – Seed funding August 2021 – Case study

Gillian O'Brien

€2000

Registered Advanced Nurse Practitioner Tissue Viability

Naas General Hospital , Department of Dermatology & Tissue Viability

Gillian and team's project aims to raise accurate diagnosis and management of 'red legs' in acute and primary care settings. They believe increased awareness and use of their Red leg RATED tool will result in appropriate prescribing of antibiotic treatment where necessary admission avoidance, reduced hospital lengths of stay, reduced representations, increased patient satisfaction, improved patient outcomes and improved utilisation of resources.

As a specialised Red Leg expert group (Dermatology, Tissue Viability, Emergency Department, Vascular, General Surgeon, and Microbiologist & Antimicrobial Stewardship) whom have identified the issue clinicians have when assessing and managing patients presenting with 'red leg' problems. They have developed an evidenced based innovative Red Legs RATED tool to address these issues which has benefited clinicians, patients and their organisation. The piloted Red Legs RATED tool resulted in 72% admission avoidance rates and recent audit results reported continued admission avoidance rates of 66%. Through Spark seed funding and support she endeavours to roll out the tool nationally. The work of implementation is ongoing and Spark will support her in this process.

ASSESSMENT

Data on Nursing and Midwifery March 2021 COVID Call Workshop Case Study

Paul Phelan

Clinical Nurse Specialist,

Department of Psychiatry, University Hospital Waterford.

The Exchange | Old Space with a Familiar Face

Especially under pandemic conditions, when face to face contact with friends, family, carers and advocates is severely restricted, patients experience many barriers to satisfying their communication needs: lack of space and privacy, limited technological knowhow or equipment such as smartphones, and the limited provision of traditional voice phones on the Unit.

Following Community Meetings, focus groups, and bedside discussion and questionnaires, it was agreed that a private and confidential space was required which Service Users could use to make video calls with family.

A fun and quirky oldstyle telephone box was fabricated to suit the small footprint available, designed to be wheelchair accessible and user friendly.

“The Exchange” Communication Hub continues to provide a useful and private space to Service Users which protects confidentiality and GDPR issues.



ASSESSMENT

Data on Nursing and Midwifery

March 2021 COVID Call Workshop

Case Study

Josephine O'Reilly

Community Mental Health Nurse

Child and Adolescent Mental Health Services (CAMHS) Cavan

The CAMHS team saw an increase in referrals for young people with Eating Disorders since the onset of the COVID-19 pandemic. They also see other young people with moderate to severe mental health concerns in the community with approximately 125 active cases on their team caseload requiring therapeutic input. The young people with eating disorders in particular are a clinical group with the highest long term morbidity rate, and need for inpatient care including one to one special care in hospital.

They see young people on an outpatient basis, or refer to inpatient services as needed. Due to the rapid increase in referrals to our team, Josephine applied to collate more resources to support parents. They developed a library of texts for parents and families as well as a selection of workbooks and clinical resources for clinicians to use in their therapeutic work both with clients with eating disorders and other presenting issues.

All clients benefit from increased access to books and resources. Clinicians in this area also benefit from having increased access to therapeutic resources and workbooks to support our clinical work. Young people with ED in particular have the highest mortality rate of all the young people we see, and are often likely to avail of costly and lengthy inpatient treatment, therefore increased therapeutic resources for this client group is indicated.

Data on Nursing and Midwifery

March 2021 COVID Call Workshop

Case Study

Mary Doyle

RANP Older Adults

Peamount Healthcare

Project Team: Sarah Mello, Louise McCarron, Eimear Flood, Michelle Fitzgerald

In room rehabilitation and wellbeing initiative during the COVID- 19 pandemic in a rehabilitation setting for older adults

The aim of this project was to increase the organisation's ability to give effective rehabilitation and meaningful activity within a patient's room during the ongoing COVID 19 pandemic.

The Spark seed funding of €1,000 helped the rehabilitation team creation of an enriched rehabilitation environment for our patients during the pandemic . Arts Materials provided meaningful and creative activities that improved dexterity, increased confidence, and provided enjoyment .

Weights and gym equipment provided in room to improve physical activity and physical wellbeing .

Orientation clocks provided in room to improve orientation, cognition and wellbeing especially for patients with dementia.



ASSESSMENT

Data on Nursing and Midwifery

March 2021- COVID Call Case Study

Catherine Carrig and Mary Devitt

Paediatric Respiratory Clinical Nurse Specialists

Childhood Asthma Education Program

Catherine and Mary recognised that a childhood asthma education programme can better support children and their families to manage their asthma effectively following referral. The resources they developed include a special wallet containing leaflets and booklets, a personalized management plan, the patient's medical letters and appointments, and QR codes allowing digital access to asthma action plans, videos on inhaler technique and emergency treatment for acute asthma attacks. The pack can be updated at further follow up healthcare appointments, and can be brought along to consultations with other clinical teams.

left to right it's Professor Basil Elnazir our respiratory consultant , Mary Devitt , Emma Kilbride our pulmonary function technician and Catherine Carrig.



ASSESSMENT

Data on Nursing and Midwifery contributions 2021

Design on the Frontline (DOTFL)

With our strong networking and engagement ethos through DOTFL we were able to link Jincy Jerry, Assistant Director of Nursing in Infection Prevention and Control, Mater Misericordiae University Hospital with designer Niamh Lynch. Niamh Lynch, Designer & Head of Fashion at Dublin Design Institute applied with her idea for PPE gown design and needed expertise from infection control. This partnership has been fortuitous

The GN95 personal protective gown makes radical improvements to the interaction, efficiency & comfort challenges arising as a result of increased PPE gown usage. Designed by incorporating key user insights related to comfort, fit, safety, temperature and difficulty donning and doffing when using traditional gowns, the GN95 comes in a one-size fits all version that enables the wearer to edit the body and cuff fit as desired. The textile provides breathability and is fabricated using sealed seams with a centre back vent allowing heat to escape, therefore stabilising body temperature. The textile also affords resistance to penetration by contaminated liquids, contagious aerosol and infective agents.

In prototyping phases at present we are excited to the final product!



The Evolution of the Consultant Innovation Fund

Following the success of the Consultant Innovation Fund in 2020 it was recognised that Senior Nurse/Midwife/ HSCP leaders were also in positions to lead out on high impact projects

In December 2021 the Spark Innovation Programme in collaboration with the Acute Hospitals Division was delighted to introduce the Hospital Innovation Fund, an initiative designed to promote innovation in Irish Hospitals by funding senior-led hospital projects.

This initiative offered funding from €20,000 up to a maximum of €60,000.

Senior healthcare professionals could apply for funding for novel initiatives that have the potential to improve the way care is delivered in our public health service.

The initiative will fund projects that:

- Add value to the hospital through increased delivery of best practice care, cost savings or increased capacity.
- Demonstrate new ways of working
- Encourage collaboration within the hospital and between organisations.
- Can be scaled up and transferred to other services or other hospitals.
- Show commitment to innovation from hospital or hospital group.

In particular, we were looking for features in the projects with:

- An emphasis on sustainability and a commitment to reducing the carbon footprint of healthcare
- Evidence of innovative or design thinking
- Engagement with emerging technologies



ASSESSMENT

The New Nurse/Midwife National Innovation Fellow Role

The ONMSD/ Spark collaboration group developed a comprehensive job description for the new post. There are great expectations for the first Nursing/Midwifery Innovation fellow!

The Role

The role of the nursing or midwifery Fellow is critical in leading and shaping the Spark Programme. The fellow will play a key part in supporting ideas, design, innovation, collaboration and initial implementation of initiatives led by frontline staff. The nursing/midwifery innovation fellow joins medical and health and social care professional fellows so as that all groups are represented in the decision-making processes, in the support to and implementation of projects - making it a truly interdisciplinary effort. This reflects how interdisciplinary collaboration is at the heart of frontline healthcare.

The Purpose

The purpose of the Nurse / Midwife Spark National Innovation Fellowship is to give a nurse or midwife the opportunity to lead and shape the Spark Programme.



Recommendations

Plans for the year ahead...

- Continue to grow the Spark Programme offerings and further strengthen our collaborative work with the ONMSD.
- In 2022 we aim to :
 - Continue, expand and evolve all Spark Initiatives nursing/ medical/ HSCP staff. By adjusting each iteration of our initiatives to further meet the needs of the frontline HSE staff and our sponsors we hope to engage with a wider range of frontline innovators.
 - Complete the Hospital Innovation Fund and support implementation of these projects
 - Complete the recruitment process for the Nursing/ Midwifery Fellow and the HSCP fellow to champion the priorities and circumstances affecting their peers. With an expanded team we aim to provide a more visible presence at HSE events and meetings
 - To continue to grow our social media presence and promotion of initiatives.
 - Spark Ignite 2021 with the HIHI and continue building this programme.
 - Develop speciality specific 'Design thinking bootcamps'
 - Expand our Innovation Network with units with established/ establishing Innovation departments/ dedicated staff
 - Spark Summit 2022...In person conference!
 - Spark Innovation Series: Online webinars briefly introducing bitesize design thinking sessions to HSE staff.